AMENDMENTS TO THE CLAIMS

Please amend claims 3, 5, 6, 9-11, 14 and 16-20 as follows:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) Method for coordinated management of a plurality (12) of contactless radio-frequency readers (12a, 12b, 12c) of chips (15a, 15b, 15c) incorporating an electronic microcircuit (16), wherein a current transmit/receive cycle Tx/Rx between a reader (12a, 12b, 12c) and the microcircuits (16) accessible by the reader includes a transmit operation Tx of transmitting a command instruction from the reader to the microcircuits followed by a receive operation Rx of the reader (12a, 12b, 12c) receiving the response from the microcircuits (16), characterized in that the transmit/receive cycles Tx/Rx of the active readers are synchronized to group the transmit operations Tx in a first time interval and to group the receive operations Rx in a second time interval with no overlap between the two time intervals.

2. (Original) Method according to claim 1, characterized in that the transmit operations Tx are grouped so that they finish at substantially the same time.

3. (Currently Amended) Method according to ~~either~~ claim 1 ~~or claim 2~~, characterized in that the synchronization process includes:

- a step of collecting the durations TxL of the transmit operations Tx for sending command instructions of the first awaiting Tx/Rx cycles of the active readers (12a, 12b, 12c), and

- a step of sending the active readers instructions to execute the transmit operations Tx for sending the command instructions of the Tx/Rx cycles spread over time and in order of decreasing duration TxL, beginning with the reader assigned the command instruction of the Tx/Rx cycle having the greatest duration TxL, the delay between one execution instruction and the next being equal to the difference between the durations TxL of the Tx/Rx cycle command instructions to be transmitted by the corresponding two

readers, up to the execution instruction associated with the shortest duration TxL.

4. (Original) Method according to claim 3, characterized in that the synchronization process includes synchronizing instructions CA for connecting power to or disconnecting power from the antenna (13a, 13b, 13c) of one or more readers of said plurality of readers:

- these instructions CA simulating command instructions of a Tx/Rx cycle to an active reader,

- the time for the antenna current to stabilize after the execution of an instruction CA simulating the time TxL of the transmit operation Tx sending the Tx/Rx cycle command instruction to the active reader, said stabilization time being referred to hereinafter as the simulated duration TxL, and the instruction CA being referred to hereinafter as the simulated transmit operation Tx, and

- an instruction to execute an instruction CA simulating an instruction to execute a transmit operation Tx of a Tx/Rx cycle in which the receive operation Rx has a null duration, hereinafter referred to as a simulated Tx/Rx cycle.

5. (Currently Amended) Method according to ~~either~~ claim 3 ~~or claim 4~~, characterized in that the real and/or simulated durations TxL take the form of multiples of the period of the carrier used by the readers (12a, 12b, 12c).

6. (Currently Amended) Method according to ~~any one of claims~~ claim 3 ~~to 5~~, characterized in that the synchronization process is effected by a synchronization circuit (20) in accordance with a synchronization cycle CS initiated either by the first request for authorization to execute a real or simulated Tx/Rx cycle submitted by a reader following a request from a central control unit (18) of the reader, or automatically at the end of the last receive operation Rx of real Tx/Rx cycles corresponding to the preceding synchronization cycle CS or, if there is no real Tx/Rx cycle, at the end of the simulated transmit operations Tx.

7. (Original) Method according to claim 6, characterized in that all the readers (12a, 12b, 12c) that have transmitted requests for authorization to execute a real or simulated Tx/Rx cycle since the start of execution of the preceding synchronization cycle CS participate in a new synchronization cycle CS.

8. (Original) Method according to claim 7, characterized in that all active readers that have participated in the preceding synchronization cycle also participate in the new synchronization cycle CS.

9. (Currently Amended) Method according to ~~any one of claims~~ claim 6 ~~to 8~~, characterized in that, for each synchronization cycle CS, the step of collecting real and/or simulated durations TxL is effected for all the NL readers of the plurality (12) of readers, with determination of the number Nx of readers for which an instruction to execute the real or simulated transmit operation Tx must be sent, and the step of sending instructions to execute the transmit operation Tx is adapted as a function of Nx.

10. (Currently Amended) Method according to ~~any one of the preceding claims~~ claim 1, characterized in that the clock signals of each reader of the plurality of readers (12a, 12b, 12c) are synchronized to the same timebase.

11. (Currently Amended) Method according to ~~any one of the preceding claims~~ claim 1, adapted to be used with readers having the function of detecting and managing collisions at the level of simultaneous responses of a plurality of microcircuits to the same command instruction of a Tx/Rx cycle, characterized in that it is associated with means adapted to implement the following accelerated collision management process:

- on detection of a collision by virtue of a mismatch between the value '0' or '1' of a bit of the response and the expected value for that bit, determining the "strong" or "weak" nature of the collision as a function of the level of uncertainty as to the detected value of the response bit concerned;
- iteratively processing collisions, only "strong" collisions being processed on the first iteration.

12. (Original) Method according to claim 11, characterized in that discrimination between "strong" and "weak" collisions is obtained by fixing for each reader (12a, 12b, 12c) a predetermined sharing threshold associated with the level of uncertainty as to the detected value of the response bit concerned.

13. (Original) Method according to claim 12, characterized in that the sharing threshold is selected to distinguish between real collisions, "strong" collisions resulting from simultaneous responses from a plurality of microcircuits (16) separate from false collisions, and "weak" collisions resulting in particular from electromagnetic interference external to the readers (12a, 12b, 12c) or interference between readers with antennas in close proximity during sending of the responses Rx.

14. (Currently Amended) Synchronization circuit (20) for a plurality (12) of contactless radio-frequency readers of chips (15a, 15b, 15c) incorporating an electronic microcircuit adapted to implement the method according to ~~any one of the preceding claims~~ claim 1, characterized in that it includes a microprocessor-based processing unit (22) that is adapted to effect the synchronization and is associated with an interface circuit (24) adapted to be readily connected to each of the readers (12a, 12b, 12c) of said plurality (12) of readers.

15. (Original) Synchronization circuit (20) according to claim 14, characterized in that the interface circuit (24) includes means for demultiplexing data transmission lines from the readers.

16. (Currently Amended) Synchronization circuit (20) according to ~~either~~ claim 14 ~~or claim 15~~, characterized in that the interface circuit (24) includes means for delivering to the readers (12a, 12b, 12c) clock signals synchronized to the timebase of said processing unit (22).

17. (Currently Amended) Contactless radio-frequency reader (12a, 12b, 12c) of chips (15a, 15b, 15c) incorporating an electronic microcircuit (16) adapted to implement the method ~~according to any one of claims 1 to 13~~ in conjunction with a synchronization circuit (20) according to ~~any one of claims~~ claim 14 ~~to 16~~, characterized in that it has access to or includes hardware and software means enabling it to effect synchronization within a plurality (12) of readers, the coordinated management of read and/or write cycles Tx/Rx, in particular in the variant controlling connection of power to and/or disconnection of power from the antennas (13a, 13b, 13c) and/or in the variant employing the accelerated collision management process.

18. (Currently Amended) Contactless radio-frequency reader (12a, 12b, 12c) of chips (15a, 15b, 15c) incorporating an electronic microcircuit (16) adapted to implement the method ~~according to any one of claims 1 to 13~~ in conjunction with a synchronization circuit (20) according to claim 16, characterized in that it includes clock signal switching means (28) for switching from an internal timebase to the timebase of said processing unit (22).

19. (Currently Amended) System of contactless radio-frequency read/write reader (10) of chips (15a, 15b, 15c) incorporating an electronic microcircuit (16) adapted to implement the method ~~according to any one of claims 1 to 13~~, characterized in that it includes a plurality (12) of readers ~~according to any one of claims 17 and 18~~ connected to a synchronization circuit (20) according to ~~any one of claims~~ claim 14 ~~to 16~~ and managed by a microprocessor-based central control unit (18).

20. (Currently Amended) System of contactless radio-frequency read/write reader (10) of chips (15a, 15b, 15c) incorporating an electronic microcircuit (16) adapted to implement the method ~~according to any one of claims 1 to 13~~, characterized in that it includes a plurality (12) of readers ~~according to claim 17~~ using adaptation of the clock signal and synchronized by the timebase of a synchronization circuit (20) according to claim 16.